2006 Update to the Massachusetts
Stormwater Standards

MassDEP's
Stormwater Advisory Committee

## Stormwater Regulation

- Combination of state, federal and local rules
- •Federal rules include NPDES
  Phase 2, Multi Sector General
  Permit, and the Construction
  General Permit

#### MA Conservation Commissions

- State adopted Stormwater Standards in 1997
- Wetlands Regulations adopted those Standards
- Local Con Comms administer Wetlands Regulations
- Includes Stormwater Standards
- Within "jurisdictional areas"

### Nine Stormwater Standards

- 1. No discharging untreated stormwater or causing erosion
- 2. Post development peak discharge rates must not exceed predevelopment rates
- 3. Loss of recharge should be minimized to the maximum extent practicable
- 4. 80% of sediment (TSS) must be removed



- 5. Discharges from areas with higher pollutant loads require specific BMPs and pretreatment
- 6. Discharges to critical areas must use certain stormwater management BMPs approved for critical areas
- 7. Redevelopment must meet all standards to the maximum extent practicable; if not practicable, stormwater systems must be designed to improve existing conditions

### Nine Stormwater Standards

- 8. Erosion and sediment controls must be implemented during construction or land disturbance activities
- 9. All stormwater systems must have an operation and maintenance plan to ensure that the system functions as designed



- October 2005
- Update the Stormwater Standards
- Enhance Recharge
- Reconstitute and Reconvene a Stormwater Advisory Committee
- Report back in six months

## Stormwater Advisory Committee

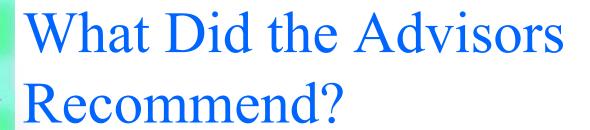
- Participants from the 1998-2000 Advisory Committee
- Additional participation solicited
- Over 90 participants
- Three Subcommittees:
  - Policy
  - Recharge
  - -BMP



- Provide advice to MassDEP
- Update and Enhance Recharge
- MassDEP administers Committee and maintains scope
- Advisors provide their best collaborative recommendations



- Recommendations given to MassDEP March 2006
- Built upon lessons learned over the last decade
- MassDEP now considering recommendations
- LID techniques interwoven throughout



- Focus the Standards on Site Planning and LID techniques
  - "proponents should consider site planning, nonstructural approaches and low impact development techniques"

 Core value that resonated through the recommendations

# What Did the Advisors Recommend for O&M?

- Enhanced disclosure of O&M requirements to Conservation Commissions and subsequent property owners
- Requires other actions to increase the likelihood that needed O&M occurs throughout the life of the BMP

# What Did the Advisors Recommend for Redevelopment Projects?

- New guidance for developers and local officials
- Redevelopment checklist helps evaluate
- How to meet Standards to the maximum extent practicable
- Must improve existing conditions.



- Adopt a Credit system to promote use of LID techniques to meet recharge requirements
- Less reliance on infiltration basins or other hard infiltration structures
- Based on the credit system specified in the EOEA Smart Growth Tool Kit

# What Did the Advisors Recommend for Recharge Calculations?

- Increase Recharge Factors used to calculate Water Quality and Recharge Volumes
- Based on soil types
  - Type A from 0.4 to 0.6
  - Type B from 0.25 to 0.35
  - Type C from 0.1 to 0.25
  - Type D from 0 to 0.1

# What Did the Advisors Recommend for BMPs?

- Add a new BMP Summary Chart
  - Highlights the suitability of different BMPs for various purposes
  - Encourages practitioners to begin with LID Site Design techniques
- Add innovative LID BMPs to encourage their use



- Resolve issue of whether constructing BMPs can create wetlands jurisdictional area
- Prescribe standard methods for calculating dynamic infiltration
- Allow greater maximum infiltration rate in some soils with appropriate treatment
- Clarify use of Manufactured BMPs



- Preserve Natural Areas
- Decentralize recharge and treatment
- Smaller structures and basins
- Better O&M
- More recharge

### For More Information . . .

- www.mass.gov/dep/
  - Go to Quick Links, select Stormwater,
     Click Go
- Frederick.Civian@state.ma.us
  - stormwater information and assistance
- http://www.mass.gov/envir/sgtk.htm
  - EOEA's Smart Growth Toolkit

